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SPECIFICATION AMENDMENTS:

On page 12 kindly insert the following directly after the brief description of Figure 16 --

Fig. 17   shows a repeating sequence of layers A,B whose sum of thicknesses changes continuously along the x-direction; and

Fig. 18   shows a repeating sequence of layers A,B whose sum of thicknesses changes continuously along the y-direction. --.

Kindly replace the first full paragraph on page 19 as follows --

Fig. 5 shows a typical application (a so-called monocrystal diffractometer). The X-ray radiation 52 emanating from an X-ray source 51 (with collimator 200μm) is focused onto the two-dimensional detector 54 by a rotationally symmetrical reflector 53 (e.g. MICROMIRROR). Due to the finite size of the X-ray source (e.g. 0.1 mm diameter), the beam image at the image focus 61 (see Fig. 6) is also typically some 0.1mm. The sample 55 typically has a diameter of 0.5mm and is typically located 10cm in front of the detector 54. The beam shape 62 is annular at this location. The ~~sample 54~~ sample 55 is thereby not optimally illuminated. Conversely, disadvantages occur when the sample is placed at the focus, since the scattered radiation is not point-like at the detector. The fundamentally annular beam profile 62 outside of the image focus is generally disadvantageous. --.

On page 26, kindly insert the following after the first paragraph ending on line 9 --

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Figs. 17 and 18 show embodiments of the invention in which a periodic

sequence of layers of materials (in this case two materials, A and B) have

thicknesses whose sum changes continuously in the x (Fig. 17) and y (Fig.

18) directions. --.